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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/590,430

06/18/2007

Andreas Obrebski

82542

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23685 7590 09/11/2009
KRIEGSMAN & KRIEGSMAN
30 TURNPIKE ROAD, SUITE 9
SOUTHBOROUGH, MA 01772

EXAMINER

BOOTH, MICHAEL JOHN

ART UNIT

PAPER NUMBER

3774

MAIL DATE

DELIVERY MODE

09/11/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,430	Applicant(s) OBREBSKI, ANDREAS	
	Examiner MICHAEL J. BOOTH	Art Unit 3774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-15 and 17-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-15 and 17-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

In view of applicant amendment to the specification and abstract, the objection is hereby withdrawn. In view of applicant amendment to the claims, the rejection under 35 USC 112 is hereby withdrawn. Further with respect to claim 10, in view of applicants further explanation, the term "separated" is noted and the rejection is withdrawn.

Applicant's arguments filed 05/29/2009 have been fully considered but they are not persuasive. On page 15 of applicant arguments, applicant argues that Klopotek fails to disclose the media being flexible in shape and formed as a liquid or a type of gel. Examiner respectfully disagrees, as pointed out previously, the optical elements **14 & 16** are flexible in shape since they are made of silicone and thus are a type of liquid or gel **column 7, line 62**. On page 16, applicant further argues that Klopotek does not provide for both media being flexible in shape and formed as a liquid of gel. Examiner respectfully disagrees, in **column 7, line 62**, it specifically states that "the membranes can be formed of silicone..." and thus it is the examiners position that both media are flexible. Applicant further argues that the membranes do not contact each other. Examiner respectfully disagrees, the claim only requires contact on at least one interface, whereby the term "interface" is broadly interpreted and the membranes may contact each other via another element or via a boundary (see google define, in the google search box, type "define:interface"). Thus, the rejection as previously set forth is deemed proper and the examiner must maintain the previous rejection.

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Examiner respectfully acknowledges the applicants invention; however, the claims as presently presented are very broad, and interpreted as such, and read upon the prior art of record.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-11, 13, 15, 17-18, 21-22, 24, and 26-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Klopotek USPN 6,730,123 “Klopotek”.

With respect to claims 1, 2, 7; Klopotek discloses an artificial lens (10) having two or more media, such as optical elements (14 & 16), that are flexible and come into direct contact with one another as lens elements, in an uptake container or optical chamber (18), thus forming a lens body. (column 2, lines 28-39). Such optical elements displaced relative to one another. Since Klopotek discloses increasing pressure in such chamber, it is inherent that the elements are fixed in space in the uptake container. Klopotek discloses media, such as an optical element **14 & 16**, formed of a gel or liquid, such as a hydrogel or silicone (column 7, line 62; which references the elements explicitly as previously discussed), that is flexible in shape.

With respect to claim 3; Klopotek discloses an artificial lens suitable for accommodation (abstract), wherein the lens is capable of changing shape and focusing.

With respect to claim 4; Klopotek discloses determining the refractive power prior to implantation, thus providing a pre-adjusted refractive power. (column 1, lines 22-33).

With respect to claim 5; Klopotek discloses a dynamic range of refractive power at least 1.5 diopters. Since the cornea provides about 40 D and the lens provides about 20 D as disclosed by Klopotek. It is inherent that there is a range and that it is at least 1.5 diopters. (column 1, lines 10-21 and lines 45-59).

With respect to claim 8; Klopotek discloses an artificial lens with an optical chamber therebetween two optical elements, further with a pump to create a pressure within the optical chamber, thus changing the size and/or shape due to these pressure changes between the media. (column 2, lines 28-39).

With respect to claim 9; Klopotek discloses a control device for controlling the artificial lens, such as a gear pump. (column 2, lines 55-67).

With respect to claim 10; Klopotek discloses the two media, whereby they do not mix, since they are silicone and separate, they remain separate, even if they touch.

With respect to claim 11, 21; Klopotek discloses at least one boundary of the uptake container (18) having at least one arched contour, such as shown in FIG. 1A. Klopotek further discloses the medium, flexible in shape, displaced in direction when accommodated, such that at least one optical element's curvature is altered. Since the optical elements are accommodating, the lens will adjust its curvature in response to this.

With respect to claims 13, 15; Klopotek discloses one or more boundaries of an optical chamber or uptake container made of flexible material, at least in regions. (abstract). Such boundaries exist on the material, and the material is flexible, thus the boundaries are flexible. Klopotek further discloses a medium that is flexible and applied to at least one surface. Such as an optical element applied to another optical element.

With respect to claim 17; Klopotek discloses media made in the form of one or more drops, such as an onion-like structure, would be the same structure as a drop. (column 2, lines 1-6).

With respect to claim 18; Klopotek discloses media in claim 16 above, and further discloses two optical elements, both being made of the same material, thus, it is inherent that both media would have the same or approximately the same density.

With respect to claim 22; Klopotek discloses a means for changing the interface(s), such as a gear pump, wherein gears have a center and are disposed annularly around said center or opening where the gears are housed. (FIG. 2).

With respect to claim 24; The Examiner recognizes claim 24 as a "product-by-process" claim. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process (*In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966).

Klopotek discloses all of the structural limitations of the artificial lens wherein the lens is flexible in shaped as disclosed previously.

With respect to claims 26-29; Klopotek discloses a means for changing the interface of a media that is flexible in shape, such means designed to produce a pressure on at least one of the media that is flexible in shape, and pressed by a medium in a preferred direction. Such that the optical fluid therebetween the two optical elements having an increase in pressure due to a mechanical gear pump, where gear pump is considered a cylinder device due to its housing. Such pressure would cause optical fluid to compress again the optical elements and thus change the shape of the optical elements and its surround structures attached thereof. (column 2).

With respect to claim 30; Klopotek discloses a control device for controlling the artificial lens, such as a gear pump, with a controllable membrane, such as the gears. (column 2, lines 55-67).

With respect to claims 31, 32; Klopotek discloses the optical elements being fastened or fused (column 4, lines 53-61) together. The two components formed as a base and cover, whereas the base and cover are fused together. The points of contact that create the fusing considered the coatings of the optical elements which are in the form of a geometric configuration of the regions of the uptake container of optical chamber to allow the elements to fuse in the shape desired.

With respect to claims 33, 34; Klopotek discloses an artificial lens with a means for stabilizing the surface structure, such as with a haptic (36a) as shown in Fig. 1A.

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Furthermore, said stabilizing means provided between two optical elements (14 & 16) as shown in Fig. 1A. (column 2, lines 40-43).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 12, 14, 19, 20, 23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klopotek USPN 6,730,123 "Klopotek" as applied to claims 1, 2, 18, 22 and 24 above, and further in view of Esch USPN 7,122,053 "Esch".

With respect to claims 12, 14; Klopotek fails to explicitly disclose an artificial lens made transparent in one or more boundaries or media. However, Esch discloses the boundaries or media of a lens being transparent. (column 2, lines 1-6). Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Klopotek to have lens made transparent.

With respect to claim 19; Klopotek fails to disclose the temperature range that the media may be. However, it would have been obvious to one having ordinary skill in the art at the time of the invention to use a material that would have a temperature range that can withstand that of the human body in the area of approximately 37 degrees Celsius give or take depending on whether or not a person is ill or not.

With respect to claim 20; Klopotek fails to disclose the use of different optical properties such as refractive numbers. However, Esch discloses use of different indices of refraction. (column 3, lines 45-57). Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Klopotek with different indices of refraction.

With respect to claim 23; Klopotek fails to disclose the size of the clear opening. However, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Klopotek with an opening to correspond to at least the maximum pupil diameter for the eye to allow proper focusing and function of the lens.

With respect to claim 25; Klopotek fails to disclose specifically different electrical conductivity of the mediums and having electrodes. However, Esch discloses use of different optical properties such as indices of refraction. Klopotek does disclose a magnetic field generator, or electric field generator or photons. (column 2, lines 15-20). Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Klopotek with Esch's different optical properties to have

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different electrical conductivity on the mediums further with an electrode to allow proper use of the magnetic field generator as disclosed by Klopotek to aid in accommodation.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **MICHAEL J. BOOTH** whose telephone number is (571)270-7027. The examiner can normally be reached on Monday thru Thursday 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Isabella can be reached on (571) 272-4749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael J Booth/
Examiner, Art Unit 3774
September 8, 2009
/Thomas J Sweet/
Primary Examiner, Art Unit 3774